Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246
(513) 648-3155

MAR 1 1 2005

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0186-05

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT EXCAVATION PLAN FOR STREAM CORRIDORS STORM SEWER OUTFALL DITCH

References:
1) Letter, J. Saric to J. Reising, "Storm Sewer Outfall Ditch Excavation Plan," dated February 10, 2005

2) Letter, T. Schneider to W. Taylor, "Comments - Excavation Plan for Stream Corridors SSOD," dated March 2, 2005

Enclosed for your review and approval are the responses to the Ohio Environmental Protection Agency comments on the draft Excavation Plan for Stream Corridors Storm Sewer Outfall Ditch. This document was approved by the U.S. Environmental Protection Agency as noted in Reference 1. Upon approval of these comment responses, the Excavation Plan will be revised and submitted as final for approval.

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,

William J. Taylor
Director

FCP:Reising

Enclosure: As Stated

cc w/enclosure:
D. Pfister, OH/FCP
J. Reising, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SR-6J
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
K. Alkema, Fluor Fernald, Inc./MS01
J. Chiou, Fluor Fernald, Inc./MS64
F. Johnston, Fluor Fernald, Inc./MS52-5
C. Murphy, Fluor Fernald, Inc./MS77
ECDC, Fluor Fernald, Inc./MS52-7

RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE EXCAVATION PLAN FOR STREAM CORRIDORS STORM SEWER OUTFALL DITCH

FERNALD CLOSURE PROJECT
FERNALD, OHIO

MARCH 2005

U.S. DEPARTMENT OF ENERGY

RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT EXCAVATION PLAN FOR STREAM CORRIDORS STORM SEWER OUTFALL DITCH (20820-PL-0001, REVISION A)

COMMENTS

1. Commenting Organization: OEPA Commenter: OFFO
Section #: 1.0 Pg #: 1-1 Line #: Code: C
Original Comment #: 1
Comment: With DOE's continued subdividing of project areas into smaller and smaller pieces, the need for clear figures, defined boundaries and cross-referencing becomes even more important. Due to the stream corridors excavation project being divided into two separate excavation plans, it should be made clear in the titles, text and figures. Both plans should address what's exactly being covered under each excavation document and include that each document is part of the stream corridors remediation.

Response: Agree.

Action: Section 1 will be modified to address what's exactly being covered under this excavation document and that it is part of the Stream Corridors remediation.

2. Commenting Organization: OEPA Commenter: DSW
Section #: 1.0 Pg #: 1-1; Fig 1-2 Line #: 20-25; NA Code: C
Original Comment #: 2
Comment: Some of the areas between the labels "Western Tributary" and "SWRB Overflow" in the drawing has been part of the drainage to the SSOD. There is a drainage ditch just to the south of the western SWRB and north of the SP3 restoration that brings water from the west to the SSOD. Prior to the excavation of the road, there was a small culvert that allowed water to drain to that area. If that area still drains to the SSOD it should be included in the map and in drainage area calculations.

Response: Since the excavation of the roadway [see Addendum No. 1 to the Implementation Plan for Area 2, Phase II (A2PII) - Subarea 3 (Infrastructure) Subcontractor Laydown Area and Equipment Wash Facility], this area no longer drains through this ditch. Therefore, it is not included in the Storm Sewer Outfall Ditch (SSOD) drainage area shown in Figure 1-2.

Action: No action.

3. Commenting Organization: OEPA Commenter: DSW
Section #: 1.0 Pg #: 1-2 Line #: 13-18 Code: C
Original Comment #: 3
Comment: Although we agree that excavation of this contamination into the A2PII boundary makes sense, the drawing cited to show this is not clear in depicting the boundaries of the two areas (SSOD and A2PII, Subarea 3). A drawing showing this in more detail would be helpful.

Response: Agree.

Action: A figure will be added to Section 1 that shows the A2PII and SSOD boundary in this area and the radium excavation area that overlays this boundary.

4. Commenting Organization: OEPA Commenter: DSW
Section #: 2.4.2 Pg #: 2-5 Line #: 23-24 Code: C
Original Comment #: 4
Comment: This first sentence explains that above-FRL contamination will be bound by physical sampling or real time. Real time scanning can only be used in regards to rads. Please change the word "or" for "and."

Response: Agree.

Action: This sentence will be changed to read as follows:

"Excavation boundaries for the SSOD are established based on above-FRL contamination identified as a result of physical sampling and bound by physical sampling and real-time scanning."

5. Commenting Organization: OEPA Commenter: DSW
Section #: 2.4.2 Pg #: 2-7 Line #: 2-3 Code: E
Original Comment #: 5
Comment: Please further clarify this sentence by stating clearly that it is arsenic in these two locations (A2PII-AQL2 and A2PII-AQL3) for which no further investigation is planned. The reader should understand that it is not radium-226 nor other areas of A2PII being considered for any further investigation. It should be further clarified that the excavation in this section (line 27, p2-6 to line 3, p2-7) is included as part of the excavation described in lines 5-9 on p2-7.

Response: Agree.

Action: This sentence will be changed to read as follows:

"No further investigation for this COC (i.e., arsenic) is planned."

Because this issue and others identified in the comments relating to Section 2.4.2 speak to the clarity of the information being communicated, this section will be modified to:

1) Have subheadings identifying each discrete excavation area as "Above-FRL Area 1, Above-FRL Area 2, etc." and,

2) Add a table outlining each above-FRL area identified as Table 2-4 in the document.

6. Commenting Organization: OEPA Commenter: OFFO
Section #: 2.4.2 Pg #: 2-6 Line #: 27-33 Code: C
Original Comment #: 6
Comment: This section states that Ra-226 was used to bound SSODD-6 areas at 2.5 feet, even when arsenic contamination above the FRL was found at "greater depths" than the radium. Aside from the fact that DOE is claiming the "levels are consistent with background," DOE will need to provide statistics for the arsenic justification and include all COCs in the Certification Report. In addition, it would be helpful if DOE provided the adjusted arsenic value for the 24 to 36-inch intervals in documents where they are "concluding" arsenic levels are within background.

Response: Agree. Statistical analysis comparing the subsurface arsenic levels to background conditions and justification of completion of removal of impacted material will be presented in the Certification Report for the area. The final statistics of residual levels for all area-specific constituents of concern for certification, which will be identified in the Certification Design Letter including arsenic as well as other secondary constituents, will be presented in the

Certification Report. Additionally, the background and observed subsurface arsenic levels will be incorporated into the text of this document.

Action: Revise the text of Section 2.4.2 to include for reference, the arsenic levels in the subsurface.

7. Commenting Organization: OEPA Commenter: DSW
Section #: 2.4.2 Pg #: 2-7 Line #: 6-9 Code: E
Original Comment #: 7
Comment: It was difficult to know the southern boundary location without having seen it on site. Suggest further clarification by stating that the "minor tributary" is a small drainage ditch to the SSOD and that the excavation will include crossing this drainage ditch to the south side. A more detailed drawing of this area, including topographic relief, would be useful as well.

Response: Agree. The text will be modified to clarify the topography of the area. A topographical figure with the proposed excavation boundary will also be inserted to provide additional clarification of the southern boundary

Action: This sentence will be changed to read as follows:

"Since the area was not bound to the south, the excavation boundary was conservatively moved to include a small, roughly east to west oriented, drainage ditch including it's southern bank. This bank is in close proximity to the northern certification boundary for the former Active Flyash Pile. This has the added benefit of including as part of the excavation process, any sediments that may have accumulated in the streambed."

Also, Figure 2.8 will be inserted to show aerial topography in the vicinity of excavation at the drainage ditch north of the former Active Flyash Pile.

8. Commenting Organization: OEPA Commenter: OFFO
Section #: 2.4.2 Pg #: 2-7 Line #: 5-9 Code: C
Original Comment #: 8
Comment: Ohio EPA would normally not accept the bounding approach described in this section, since physical samples are usually required to bound an area. However, since Ra-226 is driving the excavation real time can confirm the excavation boundary along the current certification line of the former AFP. In addition, DOE needs to include language clarifying this issue in this Excavation Plan. Ohio EPA concurs with this bounding approach.

Response: Agree. The text of this section will be revised to justify the acceptability of this bounding approach.

Action: Section 2.4.2 will be revised to include a description of how high-purity germanium detector (HPGe) systems were used to provide surface results at a detection limit equal to or less than the FRL for radium-226 to bound the contamination.

9. Commenting Organization: OEPA Commenter: DSW
Section #: 2.4.2 Pg #: 2-7 Line #: 11-14 & 29-32 Code: E
Original Comment #: 9
Comment: Here and elsewhere in the document (e.g., Section 3.2) nine distinct areas of excavation are mentioned. It would be extremely helpful to organize the descriptions and the map to show this. I went through the descriptions numbering them, and then numbering and outlining the areas on Figure 2.3 to try and see where the areas of excavation were. This was very time consuming and difficult (e.g., and excavation area #5 covers two separate paragraphs on pages 2-6 and 2-7). Having a table/map or some distinct description would help, as it was, I keep coming up with 10 distinct areas of excavation (unless I include SSODD-6 with the A2P2-AQL3N, A2P2-AQL3N2, A2P2-AQL2W, A2P2-AQL3E blocks).

Response: Agree.

Action: See Action for Comment #5.

10. Commenting Organization: OEPA Commenter: DSW
Section #: 2.4.2 Pg #: 2-7 Line #: 11-14 & 29-32 Code: C
Original Comment #: 10
Comment: These two locations had aroclor-1254 hits above the FRL. Although SSODD-2 was only slightly above the FRL, SSODF-2 was considerably higher. These PCBs bind tightly to soil and the SSOD tends to get flashy runoff. That these hits were on the surface seems to indicate relatively recent deposition. Since the site is still in remediation, what assurance do we have, that once these are removed, additional contamination from upgradient will not re-contaminate the remediated SSOD?

Response: The contamination in the SSOD is a result of historical overflow events from the Storm Water Retention Basins (SWRBs) and other up gradient sources. Administrative controls are in place to prevent any future overflow events from the SWRBs and the known major source area of PCB contamination has been removed with the excavation of the road adjacent to the west SWRB. As always, once an area has undergone remediation and subsequent certification, runon controls are implemented to protect the area from re-contamination. However, in the unlikely event that an area is potentially re-contaminated, additional samples will be collected to identify the presence and/or extent of this contamination. If contamination is found, the area will be re-excavated and re-certified to demonstrate successful remediation.

Action: None.

11. Commenting Organization: OEPA Commenter: DSW
Section #: 3.1.1 Pg #: 3-1 Line #: 12-16 Code: C
Original Comment #: 11
Comment: It is unclear from the drawings where a construction safety fence will be installed. Please include detail showing this, and please install fences above the normal high water line so that they will not be damaged by nor hinder high flows.

Response: Locations for the Construction Fence are shown on the two drawings. Due to the topography and the wooded area lining both banks along much of the SSOD excavation areas, it is only planned to place construction fence along the top of the embankment where access is made to the excavation area. This includes the limited excavation at the top of the embankment overlaying the A2PII and SSOD remedial boundary.

Action: No action.

12. Commenting Organization: OEPA Commenter: DSW
Section #: 3.1.3 Pg #: 3-1 Line #: NA Code: C
Original Comment #: 12
Comment: Include either in the package (preferably) or by reference the clearing plan submitted separately to the OEPA. In addition, when DOE submits the second excavation plan for the PPDD and Paddys Run, include the clearing plan with that package.

Response: Agree.

Action: The Clearing Plan will be added to the Excavation Plan as an addendum.

13. Commenting Organization: OEPA Commenter: DSW
Section #: 3.1.5 Pg #: 3-2 Line #: 7-16 Code: C
Original Comment #: 13
Comment: Controls should be put in place to keep excessive run-on from entering the work area and excavations. Although this may not be possible in the area of flow in the SSOD itself, it should be done in areas along the bank where excavations are taking place. Water should be routed around these areas in much the same manner as was done in the A2PII radium hot spot along the banks of Paddys Run (see Specification 02275, Section 3.1.B).

Response: Agree. A small berm or ditch will be constructed around the perimeter of the excavation area at the top of the embankment overlaying the A2PII and SSOD remedial boundaries that extends into the SSOD creek bed to minimize runon into the excavation area (see control points 19 through 24 on drawing 99X-5500-G-00788). In addition, a small berm will be constructed along the sides of the access ramp shown on drawing 99X-5500-G-00787.

Action: Drawings 99X-5500-G-00787 and 99X-5500-G-00788 will be modified accordingly.

14. Commenting Organization: OEPA Commenter: DSW
Section #: 3.2 Pg #: 3-2 Line #: 22-32 Code: C
Original Comment #: 14
Comment: Specify that trucks will be covered prior to moving from the excavation area.

Response: Disagree. Haul trucks are not covered for hauling material to the OSDF from an on-site excavation. The material to be excavated is wet and will not be overloaded. Therefore, neither dust nor spillage should be an issue during on-site transportation of this material. As an example, the haul trucks used to removal the impacted soil from the A2PII radium hot spot excavation were not covered.

Action: No action.

15. Commenting Organization: OEPA Commenter: OFFO
Section #: 3.2.1 Pg #: 3-3 Line #: 18-20 Code: C
Original Comment #: 15
Comment: The excavation procedure described for the "north end of the ditch" is unclear in the text and on Figure 3-2. Please clarify the reference which suggests "performed from above" and "accessing the excavation through a chain-link fence."

Response: The excavation at the "north end of the ditch" can be performed by placing an excavator at the top of the embankment and reaching into the excavation area. However, to gain access to the place where the excavator would have to be positioned will require that a chain-link fence be temporarily removed.

Action: No action.

16. Commenting Organization: OEPA Commenter: OFFO
Section #: 3.2.2 Pg #: 3-4 Line #: 29-32 Code: C
Original Comment #: 16
Comment: Here and elsewhere the addition of coarse aggregate material is specified to fill excavations (see comment #19).

Response: See Response to Comment #19.

Action: No action.

17. Commenting Organization: OEPA Commenter: DSW
Section #: 3.2.3 Pg #: 3-5 Line #: 16-19 Code: C
Original Comment #: 17
Comment: Access should be made up the SSOD via Paddys Run. There is an existing road that is used for the monitoring well near Paddys Run that will allow access to Paddys Run through the Carolina Area. Care must be taken not to cause any undue adverse effects to the certified area. This area is one of the best performing in restorations on site both in vegetation and wetland fauna.

Additionally, the comment is made that access through Paddys Run can only be performed if water levels in Paddys Run are low. It should be evident that any of these remedial activities should be planned and executed in dry weather to prevent exposed contamination from being washed off site. This planning has to be made similar limiting factor rather than personnel or equipment schedules.

Response: Agree. See Response to Comment #18.

Action: No action.

18. Commenting Organization: OEPA Commenter: OFFO
Section #: 3.2.3 Pg #: 3-5 Line #: 16-19 Code: C
Original Comment #: 18
Comment: When performing remediation activities from or through a certified area to a contaminated area, DOE needs to include more detail on how this will be carried out to make sure that the certified area will not be recontaminated.

Response: The option to gain access to the excavation downstream of the concrete spillway through the adjacent certified area will be removed. Access will be via the Paddys Run Creek bed when drier conditions allow vehicular access.

Action: The text in Section 3.2.3 will be modified accordingly.

19. Commenting Organization: OEPA Commenter: DSW
Section #: 3.4 Pg #: 3-5 Line #: 33 Code: C
Original Comment #: 19
Comment: Here and elsewhere the addition of coarse aggregate material (e.g., reject material from the OSDF) is specified to fill the excavations. If the SSOD pump test is successful, it makes more sense to leave the excavations to enhance infiltration. By the nature of a dynamic system, depressions move through the streambed naturally (case in point is the very deep hole by the SWU in Paddys Run which appeared and disappeared in a single year). Incurring the costs in equipment, personnel, and to the environment does not seem worthwhile to refill those in stream excavations.

Response: Agree. The requirement to fill the excavation with coarse aggregate will be removed from the design and Excavation Plan.

Action: Note #6 on drawing 99X-5500-G-00787 and second sentence in Section 3.4 will be removed.

20. Commenting Organization: OEPA Commenter: DSW
Section #: 3.4 Pg #: 3-6 Line #: 3 Code: C
Original Comment #: 20
Comment: The seed specification for the OSDF is specific to the OSDF. The seed specification should be the current specification for upland, mesic, and wet areas sitewide.

Response: Agree. There are four permanent seed mixes in OSDF Phase V Specification 2930: Dry, Wet, Sandy, and Cell Final Cover. The appropriate permanent seed mix will be used based on field conditions.

Action: No action.

21. Commenting Organization: OEPA Commenter: OFFO
Section #: Figure 3-2 Pg #: NA Line #: NA Code: E
Original Comment #: 21
Comment: More detail needs to be included on this figure regarding the North Excavation Route.

Response: Agree.

Action: The figure will be modified to give more detail as to the haul route from the North Excavation Area.

22. Commenting Organization: OEPA Commenter: DSW
Section #: Tech Spec 02205, 3.2 Pg #: 6&7 of 18 Line #: NA Code: C
Original Comment #: 22
Comment: The wording in this section seems inappropriate for this remedial activity, particularly wording about holding work and backfilling.

Response: Agree.

Action: See Response to Comment #23.

23. Commenting Organization: OEPA Commenter: DSW
Section #: Tech Spec 02206, 3.2 Pg #: 4&5 of 7 Line #: NA Code: C
Original Comment #: 23
Comment: References to installing a GMA plug do not seem appropriate for this remedial activity. Use of the SSOD as a conduit to the GMA is advantageous to the site as demonstrated by the pump test to infiltrate water into the GMA.

Response: Agree.

Action: Note #1 on drawing 99X-5500-G-00787 will be modified to exclude Subsection 3.2 from technical specification section 02205 and Subsections 3.2.B and 3.2C from the technical specification Section 02206 from being applicable to this remedial action. In addition, a note will be added to drawing 99X-5500-G-00787 stating that requirements contained in the referenced technical specifications are applicable where pertinent to remedial activity scope illustrated on the construction drawings.

24. Commenting Organization: OEPA Commenter: DSW
Section #: Tech Spec 02930 Pg #: NA Line #: NA Code: C
Original Comment #: 24
Comment: Two different versions of this specification are provided in the package, one with the "Technical Specification for Soil and Disposal Facility Project, Excavation for Remediation, Document 20300-TS-0001, Revision 1, February 2003" package and one with the "Technical Specifications, On-Site Disposal Facility Phase V, Revision 0, January 2004, 20105-TS-0001" package. Please work with Natural Resource to have only the correct specification in the package and to use the correct seed mix.

Response: OSDF Phase IV specifications where inadvertently copied into the specification submittal. Only Phase V specs where supposed to be submitted. Ignore Phase IV specifications. This can be determined by looking at the header on each page of the OSDF specs. Phase IV

specifications have a header that reads like "OSDF PHIV-SPEC REV 0": Phase V specifications have a header that reads like "OSDF PHV-SPEC REV 0". Note #1 on drawing 99X-5500-G-00787 specifies the technical specifications that govern this activity. The OSDF Phase IV specs are note included.

Action: OSDF Phase IV specs will not be included with the final submittal.